



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

March 23, 2006

Mr. David W. Vreeman
Vice President and Chief Financial Officer
Credo Petroleum Corporation
1801 Broadway, Suite 900
Denver, CO 80202

Re: Credo Petroleum Corporation
Form 10-K for the Fiscal Year Ended October 31, 2005
Filed January 30, 2006
File No. 000-8877

Dear Mr. Vreeman:

We have reviewed your filing, and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended October 31, 2005

Properties, page 11

Significant Properties, Estimated Proved Oil and Gas Reserves, page 11

1. We note that you disclose the measure Estimated Future Net Revenues Discounted at 10% (PV-10) in your tabular presentation. As this financial measure is not defined in U.S. GAAP, it will be necessary to either remove the measure from your filing, or to comply with the disclosure requirements of Item 10(e) of Regulation S-K. Under this guidance, you would need to include a

reconciliation of this measure to the most directly comparable GAAP-based measure, which we believe would be the standardized measure of future net discounted cash flows, as set forth in paragraph 30 of SFAS 69.

Management's Discussion and Analysis, page 17

Liquidity and Capital Resources, page 17

2. We note that you present cash flow from operating activities (before changes in operating assets and liabilities) as a non-GAAP measure, and explain that you believe it may be useful to an investor in evaluating performance. We do not find your suggestion that cash flows associated with the revenues and expenses that comprise net income may be meaningfully distinguished from the actual collection and payments that are reflected in your working capital accounts. Therefore, we believe it will be necessary to either label and refer to this measure in a manner that is consistent with its character (i.e. net income adjusted to exclude the effects of depreciation, depletion, and amortization; deferred income taxes; cumulative effect of a change in accounting principal; and other – the components of other should be identified), or to remove the measure from your filings. If you expect to retain the measure, submit a discussion showing compliance with the guidance in Item10(e)(1)(ii) of Regulation S-K; and disclose the information required under paragraph Item(e)(1)(i)(C) of this guidance.

Oil and Gas Activities, page 19

Drilling Activities, page 19

3. In the second to last paragraph of this section you disclose a measure of reserve replacement and finding cost per Mcf/e. In your response to prior comment 1 included in your letter to the SEC staff dated April 12, 2005, you included draft disclosure that you explained would be included in any prospective 1934 Act filings beginning with the second quarter ended April 30, 2005. We could not locate such a discussion in your current Form 10-K. As such, it will be necessary for you to amend your current Form 10-K to provide the following information related to the use of the reserve replacement ratio and finding cost per equivalent unit:

Reserve replacement ratio:

- Describe how the ratio is calculated. We expect the information used to calculate this ratio will be derived directly from the line items disclosed in the reconciliation of beginning and ending proved reserve quantities, which is required to be disclosed by paragraph 11 of SFAS 69.

- Identify the status of the proved reserves that have been added (e.g., proved developed vs. proved undeveloped). It is not appropriate to calculate this ratio using:
 - non-proved reserve quantities, or
 - proved reserve additions that include both proved reserve additions attributable to consolidated entities and investments accounted for using the equity method.
- Identify the reasons why proved reserves were added.
 - The reconciliation of beginning and ending proved reserves, referred to above, includes several line items that could be identified as potential sources of proved reserve additions. Please disclose the nature of the reserve additions, whether or not the historical sources of reserve additions are expected to continue, and the extent to which external factors outside of your control impact the amount of reserve additions from that source from period to period.
- Explain the nature of and the extent to which uncertainties still exist with respect to newly discovered reserves, including, but not limited to, regulatory approval, changes in oil and gas prices, and the availability of additional development capital and the installation of additional infrastructure.
- Indicate the time horizon of when the reserve additions are expected to be produced to provide investors a better understanding of when these reserve additions could ultimately be converted to cash inflows.
- Disclose how management uses this measure.
- Disclose the limitations of this measure.

Finding cost per equivalent unit:

- Describe how the ratio is calculated.

The information used to calculate this ratio should be derived directly from the line items disclosed in the schedule of costs incurred and the reconciliation of beginning and ending proved reserve quantities, which is required to be disclosed by paragraphs 11 and 21 of SFAS 69. To the extent applicable, information in the disclosures required by paragraph 30(b) of SFAS 69 should be used to calculate this ratio.

If the ratio does not use data determined in accordance with SFAS 69, please:

- Identify the source of the data;
- Indicate whether or not the ratio is a non-GAAP measure, as defined by Item 10(e)(2) of Regulation S-K;
- Tell us why you believe it is appropriate to disclose the measure in Commission filings, based on the conditions identified in Item 10(e)(1)(ii) of Regulation S-K; and, if it is determined that it is appropriate to disclose the non-GAAP measure in Commission filings, provide the disclosure required by Item 10(e)(1)(i) and Question 8 of the Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures, which can be located at <http://www.sec.gov/divisions/corpfin/faqs/nongaapfaq.htm>.
- Ensure that finding and development costs used to calculate the measure include asset retirement costs. Refer to the February 24, 2004 sample letter sent to oil and gas producers regarding SFAS 69 and SFAS 143, located on our website at the following address:

<http://www.sec.gov/divisions/corpfin/guidance/oilgasletter.htm>
- Ensure that future development costs expected to be incurred relative to the specific set of reserve additions included in the calculation of the ratio are also included in the calculation.
- Identify the status of the proved reserves that have been added (e.g., proved developed vs. proved undeveloped).
 - As with the calculation of the reserve replacement ratio, it is not appropriate to calculate this ratio using non-proved reserves or to use a figure for proved reserve additions that includes both proved reserve additions attributable to consolidated entities combined with proved

reserve additions attributable to investments accounted for using the equity method.

- When a significant portion of the proved reserve additions is proved undeveloped, disclose that additional development costs will need to be incurred before these proved reserves are ultimately produced, and the impact this has on the use and reliability of the measure.
- Disclose the amount of the estimated future development costs, and clarify that the amount of estimated future development costs related to the proved reserve additions is a component of amounts disclosed in the SFAS 69 disclosures, if true.
- Identify the reasons why proved reserves were added.
 - As with the calculation of the reserve replacement ratio, the reconciliation of beginning and ending proved reserves, referred to above, includes several line items that could be identified as potential sources of proved reserve additions. Explain to investors the nature of the reserve additions, whether or not the historical sources of reserve additions are expected to continue, and the extent to which external factors outside of managements' control impact the amount of reserve additions from that source from period to period.
 - Identify all situations that resulted in a reserve addition that did not require the expenditure of additional costs. For example, changes in commodity prices and foreign exchange rates routinely have a direct impact on the quantity of proved reserves, but do not require the expenditure of additional exploration or development costs.
- Disclose how management uses this measure.
- Disclose the limitations of this measure.
- Indicate whether the finding and development cost per unit measure is comparable to other like measures disclosed by other companies.

Results of Operations, page 21

4. In your response to comment 6 included in your letter to the SEC staff dated April 12, 2005, you explain that revised disclosures surrounding your revenue recognition policy of operating revenues would be included on a prospective basis in any 1934 Act filing. However, we could not locate a discussion in the current Form 10-K similar to that included in your response. You also explained that

operating revenues are comprised of contractually based payments which you receive as operator of the well to drill and supervise the oil and gas wells, and that such amounts are reported gross as revenue.

The guidance in Rule 4-10(c)(6)(iv) of Regulation S-X stipulates that management fees and contractual charges received for services performed in connection with properties in which you or an affiliate hold an ownership or other economic interest should be recorded as a reduction to any expenses specifically attributable to the counterparty for which you are being reimbursed, with any excess being recorded as a reduction of the full cost pool. For further clarification, you may refer to the guidance in Section II.F.7 of Division of Corporation Finance: Frequently Requested Accounting and Financial Reporting Interpretations and Guidance, available on our website at the following address:

<http://www.sec.gov/divisions/corpfin/guidance/cfactfaq.htm>.

If you have recorded revenues of the sort referenced above, you may need to restate your financial statement amounts and disclosures to comply with the guidance noted above. If you do not believe such guidance is applicable in this situation, or you otherwise believe the effects are not material, please submit an analysis in support of your view.

Financial Statements and Supplementary Data, page 25

Consolidated Balance Sheets, page 26

5. On page 19 you discuss gross acre inventory available for drilling. It is unclear if these are the items you are including in inventory on the balance sheet. Expand your disclosure to explain what items are included in inventory, the reasons it is classified as a long term asset, the manner by which such items are valued, and any other applicable information that may be material to an investor.

Additionally, explain to us what items are included in “Changes in other long-term assets” within the investing section of the Statements of Cash Flows, and explain how the amounts presented for the respective years are calculated.

Note 1 – Summary of Significant Accounting Policies, page 30

Natural Gas Price Hedging, page 33

6. You disclose that you have a hedging line of credit to meet margin calls in which you are required to maintain \$3 million in cash or short term investments. The guidance in FRC Section 203.02.b states that in instances where a minimum balance must be maintained to secure the extension or availability of credit, such balances should be segregated on the face of the balance sheet. Accordingly, it appears you may need to revise your financial statements to separately present the cash and short term investments that are used to satisfy your covenant requirements, and also to disclose the portion of the \$3 million balance held in cash and the portion held in short term investments. It should be clear that you do not have access to such amounts as long as you maintain credit availability under this arrangement, as should your intentions in this regard.

Note 8 – Supplementary Oil and Gas Information, page 40

Unevaluated Oil and Gas Properties, page 41

7. Your disclosure states that the table of unevaluated oil and gas property costs is presented by category of cost. However, the only information presented within the table is the aggregate costs incurred and the period in which they were incurred. Rule 4-10(c)(7)(ii) of Regulation S-X requires you to segregate unevaluated costs into acquisition, exploration, development and capitalized interest. We note that you state “Unevaluated properties consist primarily of lease acquisition and maintenance costs.” In your response to comment 7 provided in your letter to the SEC staff dated April 12, 2005, you presented revised disclosure that you agreed to include in prospective 1934 Act filings, whereas you would disaggregate unevaluated oil and gas property cost. As such, we believe it will now be necessary for you to revise your document to present unevaluated costs of oil and gas properties into the categories required under Rule 4-10(c)(7)(ii) of Regulation S-X.

Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its

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Credo Petroleum Corporation
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management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Mark A. Wojciechowski at (202) 551-3759 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller
Branch Chief